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I hereby certify that this PRELIMINARY AMENDMENT is being deposited with the U.S. Postal Service, with sufficient postage, as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on this 2nd day of December, 2002.

Typed or Printed name of person signing this certificate:

Wendy A. Frick

Signed: \_\_\_\_\_

*Wendy A. Frick*



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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Kaumaya, et al.

Serial No.: 09/632,036

Filed: August 3, 2000

For: **POLYPEPTIDES AND  
POLYNUCLEOTIDES FOR  
ENHANCING IMMUNE REACTIVITY  
TO HER-2 PROTEIN**

Examiner: Hunt, J.

Group Art Unit: 1642

Attorney Docket No.: 18525/04011

Assistant Commissioner for Patents  
Washington, D.C. 20231

SECOND PRELIMINARY AMENDMENT

Dear Sirs:

Please amend the above-described application as follows:

IN THE SPECIFICATION

Page 11, line 1, Replace Table 1, as amended by the first preliminary amendment filed on April 3, 2002, with the following:

Table 1. Consolidated Human p185 HER-2 predicted B cell epitopes listed in the order of ranking by amino acid residue numbers. Asparagine (N)-linked glycosylation sites are underlined in bold.

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Predictive Ranking	Residue	Amino Acid Sequence	Secondary Structure
7	27 – 45	Tgtdmklrlpaspethldm	25 – 28 $\beta$ turn; 29 – 32 $\alpha$ helix; 35 – 38 $\beta$ turn
8 (DW5)	115 – 136	AVLDNGDPLNNTTPVTGASPGG	116 – 135 $\beta$ turn
9	168 – 189	LWKDIFHKNNQLALTLIDTNRS	173 – 176 $\beta$ turn; 177 – 181 $\alpha$ helix
1	182 – 216	TLIDTNRSRACHPCSPMCKGSR CWG ESSEDCQSLT	184 – 212 $\beta$ turn/loop
6	270 – 290	ALVTYNTDTFESMPNPEG RYT	273 – 286 $\beta$ turn; 278 – 280 $\alpha$ helix
3	316 – 339	PLHNQEVTAEDGTQRAEKCSKPCA	319 – 324 $\alpha$ helix; 324 – 336 $\beta$ turn.
10 (DW1)	376 – 395	PESFDGDPASNTAPLQPE	379 – 388 $\beta$ turn
12 (DW6)	410-429	LYISAWPDSLPLDSVFQNLQ	413-421 $\beta$ turn
2	485 – 503	LFRNPHQALLHTANRPEDE	497 – 500 $\beta$ turn; 499 – 504 $\alpha$ helix
11	560 – 593	CLPCHPECQPQNGSVTCFGPEADQCVACAH YKDP	561 – 572 & 589 – 593 $\beta$ turn; 579 – 581 $\alpha$ helix
4	605– 622	KPDLSYMPIWKFPDEEGA	616 – 620 $\alpha$ helix
5	628 – 650	INGTHSCVDLDDKGCPAEQRASP	635 – 642 $\beta$ turn; 643 – 646 $\alpha$ helix

Page 36, line 6:

Please replace the Sequence Listings which was filed with the Patent Office on July 11, 2002 with the Sequence Listing which is attached hereto.

#### IN THE CLAIMS:

6. (Twice Amended) A composition for stimulating an immune response to HER-2 protein, wherein said composition is a multivalent peptide and comprises 2 or more HER-2 B cell epitopes, a Th cell epitope, and a template;

wherein said 2 or more HER-2 B cell epitopes are different, and wherein each of said 2 or more HER-2 B cell epitopes is from 15 to 40 amino acids in length and comprises a sequence selected from the group consisting of:

TGTDMLRLPASPETHLDM, SEQ ID NO. 1, or a functional equivalent thereof;

AVLDNGDPLNNTTPVTGASPGG, SEQ ID NO. 2, or a functional equivalent thereof;

LWKDIFHKNNQLALTLIDTNRS, SEQ ID NO. 3, or a functional equivalent thereof;